

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 7

Complete if Known

Application Number	10/561,826
Filing Date	October 17, 2006
First Named Inventor	Catherine M. Verfaillie
Art Unit	1649
Examiner Name	Wang, Chang Yu
Attorney Docket Number	890003-2006.1

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 6653134		Prockop et al.	
		US- 6777231		Katz et al.	
		US- 7056738		Prockop et al.	
		US- 7229827		Kim et al.	
		US- 20030003090	01-02-2003	Prockop et al.	
		US- 20030059414	03-27-2003	Ho et al.	
		US- 20040235165	11-25-2004	Prockop et al.	
		US- 20050169896	08-04-2005	Li et al.	
		US- 5589376		Anderson et al.	
		US- 5602301		Field	
		US- 5648248		Zenke et al.	
		US- 5672499		Anderson et al.	
		US- 5654183		Anderson et al.	
		US- 5733727		Field	
		US- 5906934		Grande et al.	
		US- 5928943		Franz et al.	
		US- 6015671		Field	
		US- 6214369		Grande et al.	
		US- 6306575		Thomas et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		WO 01/21766	03-29-2002			
		WO 01/51610	07-19-2001			
		WO 01/53461	07-26-2001			
		WO 01/68815	09-20-2001			
		WO 95/10599	04-20-1995			
		WO 95/03062	02-02-1995			

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2

of 7

Complete if Known

Application Number	10/561.826
--------------------	------------

Filing Date	October 17, 2006
-------------	------------------

First Named Inventor	Catherine M. Verfaillie
----------------------	-------------------------

Art Unit	1649
----------	------

Examiner Name	Wang, Chang Yu
---------------	----------------

Attorney Docket Number	890003-2006.1
------------------------	---------------

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ²
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY			
		WO 99/11758	03-11-1999			
		WO 99/35243	07-15-1999			
		CA 2191655A	06-02-1997			
		EP 0627487A	12-07-1994			
		WO 02/86073	10-31-2002			
		WO 00/66713	11-09-2000			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND**

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/561,826
		Filing Date	October 17, 2006
		First Named Inventor	Catherine M. Verfaillie
		Art Unit	1649
		Examiner Name	Wang, Chang Yu
Sheet 3 of 7	Attorney Docket Number		890003-2006.1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		EGLITIS et al., "Hematopoietic cells differentiate into both microglia and macroglia in the brains of adult mice" Proc Natl Acad Sci USA; 94:4080-4085 (1997)	
		KOPEN et al., "Marrow stromal cells migrate throughout forebrain and cerebellum, and they differentiate into astrocytes after injection into neonatal mouse brains" Proc Natl Acad Sci USA; 96:10711-10716 (1999)	
		WOODBURY et al., "Adult rat and human bone marrow stromal cells differentiate into neurons" J. Neurosci. Res.; 61:364-370 (2000)	
		BERTANI et al., "Neurogenic potential of human mesenchymal stem cells revisited: analysis by immunostaining, time-lapse video and microarray" J Cell Sci.; 118:3925-36 (2005)	
		LU et al., "Induction of bone marrow stromal cells to neurons: differentiation, transdifferentiation, or artifact" J Neurosci Res; 77:174-91 (2004)	
		NEUHUBER et al., "Reevaluation of in vitro differentiation protocols for bone marrow stromal cells: disruption of actin cytoskeleton induces rapid morphological changes and mimics neuronal phenotype" J Neurosci Res; 77:192-204 (2004)	
		JIANG et al., "Pluripotency of mesenchymal stem cells derived from adult marrow, Supplemental Information for Verfaillie Corrigendum" Nature; 418:41-49 (2002)	
		VERFAILLIE, "Letter to the Editor" Experimental Hematology; (2007)	
		ALDOUS et al., "Flawed stem cell data withdrawn" New Scientist; (February 15, 2007)	
		ALDOUS et al., "Fresh questions on stem cell findings" New Scientist; (March 24, 2007)	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/561,826
		Filing Date	October 17, 2006
		First Named Inventor	Catherine M. Verfaillie
		Art Unit	1649
		Examiner Name	Wang, Chang Yu
Sheet 4 of 7	Attorney Docket Number	890003-2006.1	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial; symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		CHECK "Stem cell paper corrected" Nature; 447:763 (2007) and JIANG et al., "Pluripotency of mesenchymal stem cells derived from adult bone marrow" Erratum in Nature; 447:879-880 (2007)	
		CHI, "Adult stem cell figure retracted" The Scientist; (June 13, 2007)	
		GLENN, "Paper on versatility of adult stem cells comes under question" The Chronicle; (February 26, 2007)	
		HOLDEN, "Stem Cells. Controversial marrow cells coming into their own?" Science; 315:760-761 (2007)	
		JIANG et al., "Multipotent progenitor cells can be isolated from postnatal murine bone marrow, muscle, and brain" Exp. Hematol.; 30:896-904 (2002)	
		LERNER et al., "Stem cell study was flawed, U panel finds" Star Tribune; (February 27, 2007)	
		NOONAN, "Limitations on the usefulness of adult stem cells" Patent Docs; (February 28, 2007)	
		PINCOCK, "Adult stem cell report questioned" The Scientist; (February 26, 2007)	
		REYES et al., "Purification and ex vivo expansion of postnatal human marrow mesodermal progenitor cells" Blood; 98:2615-25 (2001)	
		SERAFINI et al., "Hematopoietic reconstitution by multipotent adult progenitor cells: precursors to long-term hematopoietic stem cells" J. Exp. Med.; 204:129-39 (2007)	

Examiner Signature	Date Considered	
--------------------	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/561,826
		Filing Date	October 17, 2006
		First Named Inventor	Catherine M. Verfaillie
		Art Unit	1649
		Examiner Name	Wang, Chang Yu
Sheet 5	of 7	Attorney Docket Number	890003-2006.1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BRAZELTON et al., "From marrow to brain: expression of neuronal phenotypes in adult mice" Science; 290:1775-9 (2000)	
		CLARKE et al., "Generalized potential of adult neural stem cells" Science, 288: 1660-3 (2000)	
		JOHANSSON et al., "Neural stem cells in the adult human brain" Exp. Cell. Res.; 253:733-6 (1999)	
		MEZEY et al., "Turning blood into brain: cells bearing neuronal antigens generated in vivo from bone marrow" Science; 290:1779-82 (2000)	
		MORSHEAD et al., "Hematopoietic competence is a rare property of neural stem cells that may depend on genetic and epigenetic alterations" Nat. Med.; 8:268-73 (2002)	
		SANCHEZ-RAMOS et al., "Adult bone marrow stromal cells differentiate into neural cells in vitro" Exp. Neurol.; 164:247-56 (2000)	
		SCINTU et al., "Differentiation of human bone marrow stem cells into cells with a neural phenotype: diverse effects of two specific treatments" BMC Neurosci.; 7:14 (2006)	
		PROCKOP et al., "Marrow stromal cells are stem cells for nonhematopoietic tissues" Science; 276:71-74 (1997)	
		CHALMERS-REDMAN et al., "In vitro propagation and inducible differentiation of multipotential progenitor cells from human fetal brain" Neuroscience; 76:1121-1128 (1997)	
		CHEN et al., "Therapeutic benefit of Intravenous administration of bone marrow stromal cells after cerebral ischemia in rats" Stroke; 32:1005-1011 (2001)	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/561,826
Filing Date	October 17, 2006
First Named Inventor	Catherine M. Verfaillie
Art Unit	1649
Examiner Name	Wang, Chang Yu
Attorney Docket Number	890003-2006.1

Sheet 6 of 7

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		REYES et al., "Turning marrow into brain: generation of glial and neuronal cells from adult bone marrow mesenchymal stem cells" Abstract 1676, American Society for Hematology (2001)	
		GUPTA et al., "Human bone marrow derived mesodermal progenitor cells (MPC) in vitro correct the biochemical abnormality in Hurler Syndrome" Abstract 1199, American Society for Hematology (2001)	
		REYES et al., "In vitro and in vivo characterization of neural cells derived from mesenchymal stem cells" Abstract 2126, American Society for Hematology (2001)	
		ZHAO et al., "Immunohistochemical identification of multipotent adult progenitor cells from human bone marrow after transplantation into the rat brain" Brain Res Brain Res Protoc; 11:38-45 (2003)	
		JIANG et al., "Multipotent progenitor cells can be isolated from postnatal murine bone marrow, muscle, and brain" Exp Hematol; 30:896-904 (2002)	
		ZHAO et al., "Human bone marrow stem cells exhibit neural phenotypes and ameliorate neurological deficits after grafting into the ischemic brain of rats" Exp Neurol; 174:11-20 (2002)	
		VERFAILLIE, C. "Investigator Profile" Journal of Hematotherapy and Stem Cell Research; 11:441-444 (2002)	
		VERFAILLIE et al., "Stem cells: hype and reality" Hematology (Am Soc Hematol Educ Program); 369-391 (2002) PMID: 12446433 [PubMed - in process]	
		KEENE et al., "Phenotypic expression of transplanted human bone marrow-derived multipotent adult stem cells into the rat CNS" Exp. Neurology; 164:465 (2000)	
		MARMUR et al., "Isolation and developmental characteristics of cerebral cortical multipotent progenitors" Developmental Biology; 204:577-591 (1998)	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<p>Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid control number.</p> <p>Substitute for form 1449/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p><i>(Use as many sheets as necessary)</i></p>				Complete if Known	
				Application Number	10/561,826
				Filing Date	October 17, 2006
				First Named Inventor	Catherine M. Verfaillie
				Art Unit	1649
				Examiner Name	Wang, Chang Yu
				Attorney Docket Number	890003-2006.1
Sheet	7	of	7		

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

1 Applicant's unique citation designation number (optional). ☐ Applicant is to place a check mark here if English language translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.